

The specification was objected to as not containing an Abstract. An abstract is submitted together herewith.

Claim 8 has been objected to as being a substantial duplicate of claim 8. Claim 8 has accordingly been canceled without prejudice or disclaimer.

Claims 2, 3 and 8 have been rejected under 35 U.S.C. §112, first paragraph, as allegedly containing subject matter which is not enabled. This rejection is rendered moot by applicants' submission. Submitted herewith is a Deposit Declaration, which establishes that the microorganism CJ50003 has been deposited under the terms of the Budapest Treaty and that all restrictions will be removed upon granting of the patent. Withdrawal of this rejection is thus respectfully requested.

Claims 1, 4, 6, 7 and 10 have been rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Huiying et al. This rejection is respectfully traversed.

Huiying et al fails to disclose or even suggest the instantly claimed attenuated Japanese encephalitis virus. According to the article Huiying et al, P3 (Peking strain) adapted into VERO cells was cultured, which differs from the instant invention. For the instant invention, the JE virus strain is adapted into VERO cells. Since Huiying et al uses a completely different strain, the reference cannot possibly disclose or even suggest applicants' invention.

In addition, the virus titer produced in Huiying et al differs from that in the instant invention. In the instant invention, Huiying et al's method merely produce 7.5 pfu/ml of cultured volume. This amount is significantly less than the 7.5 pfu/ml produced in

applicants' invention, and as specifically recited in claim 2. Moreover, Huiying et al's method is not even suitable for the production of vaccine on an industrial scale (*see*, Table 1 on page 274 and Growth curve on page 275).

Huiying et al thus fails to disclose or even suggest the instant invention.

Withdrawal of the rejection is respectfully requested and believed to be in order.

Claims 5 and 9 have been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Huiying et al and Barrett. This rejection is respectfully traversed.

As discussed *supra*, Huiying et al fails to disclose or even suggest a JE virus strain which is adapted into VERO cells. Since Huiying et al is unrelated to JE virus strain, it also fails to disclose or suggest a JE virus vaccine.

Barrett et al is cited as disclosing an inactivated JE vaccine. As acknowledged in the Official Action, Barrett et al fails to teach an attenuated JE virus adapted in Vero cells. The combination of Huiying et al and Barrett et al thus fails to disclose or even suggest a Japanese encephalitis vaccine comprising an attenuated Japanese encephalitis virus adapted to Vero cells.

As shown in the instant application, applicants surprisingly found that Japanese encephalitis vaccines could be produced in high concentration (1×10^7 pfu/ml) using an attenuated Japanese encephalitis virus adapted to Vero cells. Moreover, such a vaccine had an LD₅₀ of only 0.000001 in mouse. Such results show the production of a safe vaccine in industrial quantities, and are an improvement in the art.

In view of the above, the combination of Huiying et al and Barrett et al fail to disclose or even suggest the vaccine of claims 5 and 9. Withdrawal of the rejection of the claims is respectfully requested and believed to be in order.

In view of the above, further and favorable action in the form of a Notice of Allowance is respectfully requested. Such action is believed to be in order.

In the event that there are any questions relating to this amendment, or to the application in general, it would be appreciated if the Examiner would telephone the undersigned attorney at (508) 339-3684 concerning such questions so that prosecution of this application may be expedited.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

By:  

Donna M. Meuth

Registration No. 36,607

P.O. Box 1404
Alexandria, Virginia 22313-1404
(703) 836-6620

Date: January 31, 2001